CO3 Rec'd PCT/PTO 2 0 SEP 20

Approved for use through 3/31/2007. OMB 0651-0021 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

ATTORNEY'S DOCKET NUMBER

65959/53

CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED 10 April 2003 (10.04.2003) PCT/EP2004/003668 6 April 2004 (06.04.2004) TITLE OF INVENTION METHOD FOR IMMOBILIZING BIOMOLECULES ON METAL OXIDE SUBSTRATES APPLICANT(S) FOR DO/EO/US Ying Wu Robby Ruijtenbeek Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: 1. Land This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT 10. Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: 11. An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. A substitute specification. A power of attorney and/or change of address letter. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825. A second copy of the published International Application under 35 U.S.C. 154(d)(4). A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S.

Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT. Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Page 1 of 3

JC05 Rec'd PCT/PTO 20 SEP 2005

PTO-1390 (Rev. 07-2005)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICA	TION NO. (if known	asee 37 CFR 1.5)	■ INTERNATIONAL AP	PLICATION NO.	ATTORNEY'S DO	CKET NUMBER	
	& U.	9498	PCT/EP2004/00	3668	65959/5	3	
20. Other items or information: Copy of the International Preliminary Examination Report.							
The fe	llowing food have b	acon submitted			CALCULATIONS	BTO LISE ONLY	
1	llowing fees have b			\$ 200	\$ 300.00	PTO USE ONLY	
	31C national lee (37	CFR 1.492(a))		\$300	Ψ 300.00		
If the written opin	mination fee (37 Cl inion prepared by IS VUS indicates all cl	\$ 200.00					
	ons	ĺ					
If the written oping IPEA/US Search fee (37 Contents International Search previous)	arch fee (37 CFR 1 nion of the ISA/US S indicates all clain CFR 1.445(a)(2)) hi ional Searching Au arch Report prepar ly communicated tons	\$ 400.00					
	TOTAL OF 21, 22		· · · · · · · · · · · · · · · · · · ·		\$ 900.00		
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. Total Sheets Extra Sheets Number of each additional 50 or fraction RATE thereof (round up to a whole number)							
- 100 =	/50 =		× \$250		\$	I	
Surcharge of \$1:	30.00 for furnishing commencement of	\$					
CLAIMS	NUMB	ER FILED	NUMBER EXTRA	RATE	\$		
Total claims	;	24 - 20 =	4	x \$ 50	\$ 200.00		
Independent clai	ims	3 -3=	. 0	x \$200	\$ 0		
MULTIPLE DEP	ENDENT CLAIM(S	3) (if applicable)		+ \$360	\$	1	
		<u>, i . i </u>	TOTAL OF ABOVE	CALCULATIONS =	\$1100.00	1	
Applicant cla	aims small entity st	ed by ½.		1			
		\$	1				
	of \$130.00 for furnis date (37 CFR 1.492	\$					
		\$					
	g the enclosed assi e cover sheet (37 (\$					
		\$ 1100.00					
					Amount to be refunded:	\$	
					Amount to be charged	\$	

JC05 Rec'd PCT/PTO 2 O SERV 2005

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

a. 🔼 Acl	heck in the amount of \$ 1100.00	to cover the above fee	s is enclosed.				
	ase charge my Deposit Account Noluplicate copy of this sheet is enclosed.	in the amount of \$	to cover the above fees.				
c. The	The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>01-1785</u> . A duplicate copy of this sheet is enclosed.						
	Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.						
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.							
SEND ALL CO Craig J. Ar Amster, Ro 90 Park Av	ORRESPONDENCE TO: rnold othstein & Ebenstein LLP		SIGNATURE Craig J. Arnold NAME 34,287 REGISTRATION NUMBER				



Intellectual Property Law

90 Park Avenue New York NY 10016

Main 212 336 8000 212 336 8001 Web www.arelaw.com Morton Amster lesse Rothstein (1934 - 2003) Daniel Ebenstein Philip H. Gottfried Michael J. Berger Neil M. Zipkin Anthony F. Lo Cicero Kenneth P. George Abraham Kasdan, Ph.D. Ira E. Silfin Chester Rothstein Craig J. Arnold

Kenneth M. Bernstein

Charles R. Macedo Mark J. Rosenberg

Neal L. Rosenberg Patrick Boland* John S. Economou Michael V. Solomita Holly Pekowsky Michael P. Kenney Marion P. Metelski

Dana R. Metes Karl J. Kolbinger

10/5498

▲ Comac Pacifiand S. Mand Marc J. Jason Elie H. Gendloff, Ph.D. David Mitnick Charles W. Rath

David A. Boag Karen J. Bernstein Matthieu Hausig Jung S. Hahm Reiko Kaji

Ailler, Ph.D. Hsin-Hsin (Ginger) Liu John A. Lepore

Noraiean McCaffrey Michael J. Kasdan Sasha B. Rieders Rebecca R. Eisenberg

*Not admitted in New York

September 20, 2005

Via Express Mail (EL 993158153 US)

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Craig J. Arnold Direct 212 336 8070 E-mail carnold@arelaw.com

> EL 993158153 US "Express Mail" mailing label no. Date of Deposit: September 20, 2005
>
> I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Joycelyn Giles Fenty

Signature: Toycelyn (7

Re: United States National Stage Filing

of PCT Application No. PCT/EP2004/003668

Title: METHOD FOR IMMOBILIZING BIOMOLECULES

ON METAL OXIDE SUBSTRATES

Applicants: Ying Wu and Robby Ruijtenbeek

Our File: 65959/53

Dear Sir:

Pursuant to 35 U.S.C. § 371 and 37 C.F.R. § 1.495, enclosed please find an application for patent in the names of Ying Wu and Robby Ruijtenbeek, entitled "METHOD FOR IMMOBILIZING BIOMOLECULES ON METAL OXIDE SUBSTRATES," for entering the national stage in the United States of America, comprising the following:

- a Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) Concerning a Filing Under 35 U.S.C. § 371 (3 pages);
- a copy of PCT Application No. PCT/EP2004/003668 as 2. published under PCT Publication No. WO 2004/089531 A1, including cover page (1 sheet), specification (26 pages), claims (3 pages) and International Search Report (2 pages);
- a Preliminary Amendment (8 pages); 3.
- a copy of the International Preliminary Examination Report 4. (10 pages);

-2-

- 5. an Information Disclosure Statement Form PTO/SB/08A and copies of items listed therein;
- 6. a check in the amount of \$1100.00 to cover the total filing fee; and
- 7. a return receipt postcard.

Please charge any outstanding amount or credit any overpayment to Deposit Account No. 01-1785. A duplicate copy of this letter is enclosed. Please also acknowledge receipt of the enclosed documents by stamping the enclosed postcard and returning the same to us.

Respectfully submitted,

AMSTER, ROTHSTEIN & EBENSTEIN LLP Attorneys for Applicants 90 Park Avenue New York, New York 10016 (212) 336-8000

Dated: New York, New York

September 20, 2005

Craig I Appold

Registration No. 34,287